



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

STATIONARY SOURCE PERMIT TO OPERATE

This permit supersedes your permit dated February 22, 2012.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Mondelēz Global LLC
Richmond Bakery
6002 South Laburnum Avenue
Richmond, VA 23231
Registration No.: 50703
County-Plant ID No.: 087-0083

is authorized to operate

a commercial bakery

located at

6002 South Laburnum Avenue
Richmond, VA 23231

in accordance with the Conditions of this permit.

Approved on **DRAFT XX, 2013.**

James E. Kyle P.E.
Air Permit Manager

Permit consists of 16 pages.
Permit Conditions 1 to 52.

PERMIT CONDITIONS - the regulatory reference or authority for each condition is listed in parentheses () after each condition.

APPLICATION

1. Except as specified in this permit, the permitted facility is to be operated as represented in the permit application dated April 9, 2004, including amendment information dated April 1, 2005, May 13, 2005, October 25, 2005, November 30, 2011, July 10, 2013, August 21, 2013, October 8, 2013, and October 17, 2013. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.
(9 VAC 5-80-830)

PROCESS REQUIREMENTS

2. **Equipment List** – Equipment to be operated at this facility consists of:

Unit Ref. No.	Equipment / Operation Description	Maximum Rating Capacity	Fuel
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Boilers:

1	Boiler	10.46 MMBtu/hr	Nat. Gas
2	Boiler	10.46 MMBtu/hr	Nat. Gas

Heaters:

4	Dravo Heater	1.14 MMBtu/hr	Nat. Gas
5	Dravo Heater	0.14 MMBtu/hr	Nat. Gas
6	Dravo Heater	0.67 MMBtu/hr	Nat. Gas
7	Dravo Heater	0.292 MMBtu/hr	Nat. Gas
9-36	Unitary Heating Units	27 MMBtu/hr	Nat. Gas

Emergency Fire Pumps:

8A	Emergency Fire Pump	255 hp	Diesel
8B	Emergency Fire Pump	255 hp	Diesel

Ovens:

Oven #1	Yeast/Non-Yeast/Flavoring Dough Oven	14 MMBtu/hr	Nat. Gas
	Yeast Dough Oven	942.1 Units/yr	
	Non-Yeast Dough Oven	942.1 Units/yr	
	Flavoring Dough Oven	942.1 Units/yr	
Oven #2	Non-Yeast/Flavoring Dough Oven	14 MMBtu/hr	Nat. Gas
	Non-Yeast Dough Oven	805.5 Units/yr	
	Flavoring Dough Oven	805.5 Units/yr	
Oven #3	Non-Yeast/Flavoring Dough Oven	9.1 MMBtu/hr	Nat. Gas
	Non-Yeast Dough Oven	767.5 Units/yr	
	Flavoring Dough Oven	767.5 Units/yr	
Oven #4	Non-Yeast/Flavoring Dough Oven	14 MMBtu/hr	Nat. Gas

Unit Ref. No.	Equipment / Operation Description	Maximum Rating Capacity	Fuel
Oven #5	Non-Yeast Dough Oven	798.0 Units/yr	Nat. Gas
	Flavoring Dough Oven	798.0 Units/yr	
	Non-Yeast/Flavoring Dough Oven	9.1 MMBtu/hr	
Oven #6	Non-Yeast Dough Oven	431.5 Units/yr	Nat. Gas
	Flavoring Dough Oven	431.5 Units/yr	
	Non-Yeast/Flavoring Dough Oven	12.3 MMBtu/hr	
Oven #7	Non-Yeast Dough Oven	769.5 Units/yr	Nat. Gas
	Flavoring Dough Oven	769.5 Units/yr	
	Yeast/Non-Yeast/Flavoring Dough Oven	14 MMBtu/hr	
Oven #8	Yeast Dough Oven	2,366.6 Units/yr	Nat. Gas
	Non-Yeast Dough Oven	2,366.6 Units/yr	
	Flavoring Dough Oven	2,366.6 Units/yr	
Oven #9	Non-Yeast/Flavoring Dough Oven	9.1 MMBtu/hr	Nat. Gas
	Non-Yeast Dough Oven	911.4 Units/yr	
	Flavoring Dough Oven	911.4 Units/yr	
Oven #9	Non-Yeast/Flavoring Dough Oven	15 MMBtu/hr	Nat. Gas
	Non-Yeast Dough Oven	896.2 Units/yr	
	Flavoring Dough Oven	896.2 Units/yr	

Unit Ref. No.	Equipment / Operation Description	Maximum Rating Capacity
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Storage Bins/Transfer Systems:

1B1	Flour Storage Bin	22.5 tons/hr
1B2	Flour Storage Bin	22.5 tons/hr
1B3	Flour Storage Bin	22.5 tons/hr
1B7	Flour Storage Bin	22.5 tons/hr
1B8	Flour Storage Bin	22.5 tons/hr
1B9	Flour Storage Bin	22.5 tons/hr
1B10	Flour Storage Bin	22.5 tons/hr
1B13	Flour Storage Bin	22.5 tons/hr
1B14	Flour Storage Bin	22.5 tons/hr
1B19	Flour Storage Bin	22.5 tons/hr
1B20	Flour Storage Bin	22.5 tons/hr
2B4	Sugar Storage Bin	22.5 tons/hr
2B5	Sugar Storage Bin	22.5 tons/hr
2B6	Sugar Storage Bin	22.5 tons/hr
2B11	Flour Storage Bin	22.5 tons/hr
2B12	Flour Storage Bin	22.5 tons/hr
2B15	Flour Storage Bin	22.5 tons/hr
2B16	Flour Storage Bin	22.5 tons/hr
2B17	Flour Storage Bin	22.5 tons/hr
2B18	Flour Storage Bin	22.5 tons/hr
2B21	Flour Storage Bin	22.5 tons/hr
2B22	Flour Storage Bin	22.5 tons/hr
2B23	Flour Storage Bin	22.5 tons/hr
2B24	Flour Storage Bin	22.5 tons/hr
37A	Deliver Bag Dump	2.5 tons/hr
37B	Rail Car unloading #1	22.5 tons/hr

Unit Ref. No.	Equipment / Operation Description	Maximum Rating Capacity
37C	Rail Car unloading #2	22.5 tons/hr
37D	Rail Car unloading #3	22.5 tons/hr
37E	Truck Dump	22.5 tons/hr
TS4	Flour Transfer System #4	12.75 tons/hr
TS5	Flour Transfer System #5	12.75 tons/hr
TS6	Flour Transfer System #6	12.75 tons/hr
TS7	Flour Transfer System #7	12.75 tons/hr
TS8	Flour Transfer System #8	12.75 tons/hr
TS9	Flour Transfer System #9	12.75 tons/hr
TS10	Flour Transfer System #10	12.75 tons/hr
TS12	Flour Transfer System #12	12.75 tons/hr
BNF10	Flour Transfer (Bin-WHS 10)	6.5 tons/hr
BNF20	Flour Transfer (Bin-WHS 20)	3.0 tons/hr
BNS20	Sugar Transfer (Bin-WHS 20)	0.3 tons/hr
TSS73	Sugar Transfer (Bin-WHS 30)	0.3 tons/hr
TS453	Flour Transfer (Bin-WHS 30)	3.0 tons/hr
BNF40	Flour Transfer (Bin-WHS 40)	3.0 tons/hr
BNS40	Sugar Transfer (Bin-WHS 40)	0.3 tons/hr
TS550	Sugar Transfer (Bin-MXR 50)	3.0 tons/hr
TSS550	Sugar Transfer to HT 5	0.3 tons/hr
HT5	Hold Tank	0.3 tons/hr
BNF60	Flour Transfer (Bin-WHS 60)	3.0 tons/hr
BNS66	Sugar Transfer (Bin-WHS 60)	0.3 tons/hr
TS522	Flour Transfer (Bin-WHS 60)	3.0 tons/hr
TS450	Flour Transfer (Bin-MXR 25)	3.0 tons/hr
BNF70	Flour Transfer (Bin-WHS 70)	3.0 tons/hr
BNF80	Flour Transfer (Bin-WHS 70)	3.0 tons/hr
BNS788	Sugar Transfer (Bin-WHS 70)	0.3 tons/hr
BNF81	Flour Transfer (Bin-WHS 70)	3.0 tons/hr
BNF80	Flour Transfer (Bin-WHS 80)	3.0 tons/hr
BNF81	Flour Transfer (Bin-WHS 80)	3.0 tons/hr
BNS90	Sugar Transfer (Bin-WHS 90)	3.0 tons/hr
BNF90	Flour Transfer (Bin-WHS 90)	3.0 tons/hr
BNS60	Sugar Transfer (Bin-FES 90)	0.3 tons/hr
FRS60	Transfer (Bin-BNS61)	0.3 tons/hr
BNS61	Transfer (Bin-MXR100)	0.3 tons/hr
IST	Dry Ingredient Transfer to IST	0.9 tons/hr

Transfer Systems (Internally vented):

WHS10	Flour Transfer to MXR10	6.5 tons/hr
MXR10	Mixer	6.6 tons/hr
WHS20	Dry Transfer to MXR20	3.3 tons/hr
MXR20	Mixer	3.4 tons/hr
WHS30	Transfer to MXR30	3.3 tons/hr
MXR30	Mixer	3.4 tons/hr
WHS40	Transfer to MXR40	3.3 tons/hr
MXR40	Mixer	3.4 tons/hr
WHS50	Flour Transfer to MXR50	3.6 tons/hr
MXR50	Mixer	3.4 tons/hr
WHS60	Transfer to MXR60	6.3 tons/hr
MXR60	Mixer	6.3 tons/hr

Unit Ref. No.	Equipment / Operation Description	Maximum Rating Capacity
WHS70	Transfer to MXR70	9.3 tons/hr
MXR25	Mixer	12.4 tons/hr
MXR70	Mixer	9.4 tons/hr
WHS80	Dry Transfer to MXR80	6.0 tons/hr
MXR80	Mixer	6.1 tons/hr
WHS90	Dry Transfer to MXR90	6.0 tons/hr
MXR90	Mixer	6.1 tons/hr
MXR100	Mixer	0.9 tons/hr

SEAS-MND1	Seasonal manual bag dump	600 lbs/hr
SEAS-TS1	Seasoning transfer system #1	600 lbs/hr
SEAS-REC1	Seasoning filter receiver unit	600 lbs/hr
SEAS-TS2	Seasoning transfer system #2	600 lbs/hr

Miscellaneous:

MND10	Manual Dump into MXR10	0.1 tons/hr
MND20	Manual Dump into MXR20	0.1 tons/hr
MND30	Manual Dump into MXR30	0.1 tons/hr
MND40	Manual Dump into MXR40	0.1 tons/hr
MND50	Manual Dump into MXR50	0.1 tons/hr
MND60	Manual Dump into MXR60	0.1 tons/hr
MND70	Manual Dump into MXR70	0.1 tons/hr
MND80	Manual Dump into MXR80	0.1 tons/hr
MND90	Manual Dump into MXR90	0.1 tons/hr
38	Fumigation	0.0007 tons/hr
39	Parts Washer	N/a tons/hr
40	Dough Proofing	N/a tons/hr

Unit Ref. No.	Equipment / Operation Description	Control Efficiency
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Control Equipment:

Oven #1	Regenerative Thermal Oxidizer	95.0%
Oven #7	Thermo Electric Model 600	95.0%
	Catalytic Oxidizer	
1B1	Reimelt Baghouse USS01-04	99.9%
1B2	Reimelt Baghouse USS01-04	99.9%
1B3	Reimelt Baghouse USS01-04	99.9%
1B7	Reimelt Baghouse USS01-04	99.9%
1B8	Reimelt Baghouse USS01-04	99.9%
1B9	Reimelt Baghouse USS01-04	99.9%
1B10	Reimelt Baghouse USS01-04	99.9%
1B13	Reimelt Baghouse USS01-04	99.9%
1B14	Reimelt Baghouse USS01-04	99.9%
1B19	Reimelt Baghouse USS01-04	99.9%
1B20	Reimelt Baghouse USS01-04	99.9%

Unit Ref. No.	Equipment / Operation Description	Control Efficiency
2B4	Reimelt Baghouse USS01-04	99.9%
2B5	Reimelt Baghouse USS01-04	99.9%
2B6	Reimelt Baghouse USS01-04	99.9%
2B11	Reimelt Baghouse USS01-04	99.9%
2B12	Reimelt Baghouse USS01-04	99.9%
2B15	Reimelt Baghouse USS01-04	99.9%
2B16	Reimelt Baghouse USS01-04	99.9%
2B17	Reimelt Baghouse USS01-04	99.9%
2B18	Reimelt Baghouse USS01-04	99.9%
2B21	Reimelt Baghouse USS01-04	99.9%
2B22	Reimelt Baghouse USS01-04	99.9%
2B23	Reimelt Baghouse USS01-04	99.9%
2B24	Reimelt Baghouse USS01-04	99.9%
37A	Flex-Kleen Baghouse	99.9%
37B	Flex-Kleen Baghouse	99.9%
37C	Flex-Kleen Baghouse	99.9%
37D	Flex-Kleen Baghouse	99.9%
37E	Reimelt Baghouse	99.9%
TS4	AZO D-2850 VB Baghouse	99.9%
TS5	AZO D-2850 VB Baghouse	99.9%
TS6	AZO D-2850 VB Baghouse	99.9%
TS7	AZO D-2850 VB Baghouse	99.9%
TS8	AZO D-2850 VB Baghouse	99.9%
TS9	AZO D-2850 VB Baghouse	99.9%
TS10	AZO D-2850 VB Baghouse	99.9%
TS12	AZO D-2850 VB Baghouse	99.9%
BNF10	Dust Filter #DF-10	99.9%
BNF20	Dust Filter #DF-20	99.9%
BNS20	Dust Filter #DFS20	99.9%
TSS73	Dust Filter #TSS72	99.9%
TS453	Dust Filter #TS452	99.9%
BNF40	Dust Filter #DF40	99.9%
BNS40	Dust Filter #DFS40	99.9%
TS550	Dust Filter #DF550	99.9%
TSS550	Dust Filter #DFS50	99.9%
HT5	Dust Filter #DF5	99.9%
BNF60	Dust Filter #DF60	99.9%
BNS66	Dust Filter #DF66	99.9%
TS522	Dust Filter #5DF3	99.9%
TS450	Dust Filter #DFS450	99.9%
BNF70	Dust Filter #DF70	99.9%
BNF80	Dust Filter #DF80	99.9%
BNS788	Dust Filter #DF80	99.9%
BNF81	Dust Filter #DF81	99.9%
BNF80	Dust Filter #DF80	99.9%
BNF81	Dust Filter #DF81	99.9%
BNS90	Dust Filter #DFS90	99.9%
BNF90	Dust Filter #DF90	99.9%
BNS60	Dust Filter #DF66	99.9%
FRS60	Dust Filter #DF18FRF	99.9%
BNS61	Dust Filter #DKS59	99.9%
IST	Dust Filter #DK561	99.9%

Unit Ref. No.	Equipment / Operation Description	Control Efficiency
WHS10	Dust Filter #DF1	99.9%
MND10	Baghouse	99.9%
MXR10	Dust Filter #DF1A	99.9%
WHS20	Dust Filter #DF2	99.9%
MND20	Baghouse	99.9%
MXR20	Dust Filter #DF2A	99.9%
WHS30	Dust Filter #DF3	99.9%
MND30	Baghouse	99.9%
MXR30	Dust Filter #DF3A	99.9%
WHS40	Dust Filter #DF4	99.9%
MND40	Baghouse	99.9%
MXR40	Dust Filter #DF4A	99.9%
WHS50	Dust Filter	99.9%
MND50	Baghouse	99.9%
MXR50	Dust Filter #DF5A	99.9%
WHS60	Dust Filter #DF6	99.9%
MXR60	Dust Filter #DF6A	99.9%
MND60	Baghouse	99.9%
WHS70	Dust Filter #DF7A	99.9%
MXR25	Dust Filter #DF7	99.9%
MND70	Baghouse	99.9%
MXR70	Dust Filter #DF6B	99.9%
WHS80	Dust Filter #DF8	99.9%
MND80	Baghouse	99.9%
MXR80	Dust Filter #DF6A	99.9%
WHS90	Dust Filter #DF9	99.9%
MND90	Baghouse	99.9%
MXR90	Dust Filter #DF9A	99.9%
MXR100	Dust Filter #DFMXR100	99.9%
DF-SEAS-1	Fabric Filter	99.9%
DF-SEAS-2	Fabric Filter	99.9%

(9 VAC 5-80-800)

3. **Emission Controls** – Volatile Organic Compound emissions from Oven #1, when baking yeast dough, shall be controlled by design and proper operation of Oven #1, a permanent total enclosure (PTE) and a Regenerative Thermal Oxidizer (RTO) or equivalent control device as approved by DEQ, having a destruction efficiency of at least 95 percent on a mass basis. The RTO or equivalent control device shall be provided with adequate access for inspection and shall be in operation when Oven #1 is in operation for this permit to be valid.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)

4. **Total Enclosure** – The (PTE) shall meet the following criteria:
- Any natural draft openings shall be at least 4 equivalent opening diameters from each VOC emitting point;
 - The total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;
 - The average facial velocity of air through the natural draft openings shall be at least 200 feet per minute and the direction of flow shall be into the enclosure.
 - All access doors and windows shall be closed during routine operation of the Oven #1.

- e. All of the exhaust gases from the enclosure shall be directed to the RTO or equivalent control device.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
5. **Monitoring Devices** – The RTO or equivalent control device shall be equipped with a device to continuously measure and record the combustion zone temperature on a 5-minute interval. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when Oven #1 is operating.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
6. **Emission Controls** – Volatile Organic Compound emissions from Oven #7, when baking yeast dough, shall be controlled with the Thermo Electron Model 600 Catalytic Oxidizer. The oxidizer shall have a destruction efficiency of at least 95.0%, and shall be in operation when Oven #7 is in operation for this permit to be valid.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
7. **Control Parameters** – The catalytic oxidizer for Oven #7 shall maintain a minimum set point temperature of 600 °F to obtain 95.0% control efficiency.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
8. **Monitoring Devices** – The catalytic oxidizer for Oven #7 shall be equipped with a device to continuously measure and record the oxidizer outlet temperature. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when Oven #7 is operating.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)
9. **PM and PM-10 Emission Controls at the Storage Use Bins** – Particulate Matter emissions from the loading of all storage use bins shall be controlled by Reimelt baghouses installed with each bin rated at an efficiency level of 99.9%. Each baghouse shall be equipped with a device to continuously measure the differential pressure drop across the baghouse. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The baghouse shall be provided with adequate access for inspection.
(9 VAC 5-80-850)
10. **PM and PM-10 Emission Controls at the Transfer System** – Particulate Matter and PM-10 emissions from the transfer of sugar and flour shall be controlled by a fabric filter rated at 99.9% efficient. The fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-850)
11. **PM and PM-10 Emission Controls at the Sugar and Flour Unloading System** – Particulate Matter emissions from the sugar unloading system shall be controlled by a fabric filter baghouse. The fabric filter baghouse shall be provided with adequate access for inspection. The fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-850)

12. **PM and PM-10 Emission Controls at the Dust Collection System** – Particulate Matter emissions from the assembly dust collection, flour use bin dust collection system, and the sugar use bin dust collection system shall be controlled by a baghouse for each piece of equipment. The three baghouses shall be provided with adequate access for inspection. The baghouses shall be equipped with a device to continuously measure the differential pressure drop through each baghouse. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-850)
13. **PM and PM-10 Emission Controls at the Seasoning Process on Line #7**– Particulate Matter and PM-10 emissions from the seasoning process shall be controlled by two (2) fabric filters, each rated at 99.9% efficiency. The fabric filters shall be provided with adequate access for inspection and shall be in operation when the seasoning process is operating.
(9 VAC 5-80-850)
14. **Seasoning Process on Line #7 Monitoring Devices** - The two (2) fabric filters shall each be equipped with devices to continuously measure the differential pressure drop across each fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the two (2) fabric filters are operating.
(9 VAC 5-80-850)
15. **Seasoning Process on Line #7 Monitoring Device Observation** - The process/control monitoring device used to continuously measure the differential pressure drop across the two (2) fabric filters shall be observed by the permittee with a frequency of not less than once per day. The permittee shall keep a log of the observations from the process/control monitoring device.
(9 VAC 5-80-850)
16. **Emission Controls** – The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at the appropriate locations.
(9 VAC 5-80-850)

OPERATING/EMISSION LIMITATIONS

17. **Temperature** - When baking yeast dough in Oven #1, the permittee shall demonstrate continued compliance with the destruction efficiency specified in Condition 3 by maintaining the control device minimum combustion zone temperature and residence time, established during the initial or most recently DEQ approved performance test.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
18. **Monitoring Device Observation** - The device used to measure the combustion zone temperature from the RTO shall be observed by the permittee with a frequency sufficient to ensure good performance of the RTO. The permittee shall keep a log of the observations of the combustion-monitoring device.
(9 VAC 5-80-850, 9 VAC 5-80-1180 D, and 9 VAC 5-50-260)
19. **Monitoring Device Observation** – To ensure good performance, the device used to measure the oxidizer outlet temperature for Oven #7 shall be observed by the permittee with a frequency of not less than once per shift. The permittee shall keep a log of the observations of the temperature-monitoring device.
(9 VAC 5-80-1180 D)

20. **Operating Hours** - The emergency fire pumps shall not operate more than 500 hours each per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)
21. **Operating Hours** – Ovens #1-9 shall not operate more than 8760 hours each per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
22. **Production** – The approved production for the Oven #1 is non-yeast containing dough, yeast, and flavor containing dough. A change in the production may require a permit to modify and operate.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
23. **Production** – The approved production for Ovens #2-6, 8-9 is non-yeast and flavor containing dough. A change in the production may require a permit to modify and operate.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
24. **Production** – The approved production for the Oven #7 is non-yeast containing dough, yeast, and flavor containing dough. A change in the production may require a permit to modify and operate.
(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
25. **Seasoning Mix Throughput** - The throughput of seasoning mix for the seasoning process on Line #7 shall not exceed 1,244 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)
26. **Fuel** – The approved fuel for Ovens #1-9 is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-850)
27. **Fuel** – The approved fuel for the boilers (Unit Ref. No: 1-2) is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-850)
28. **Fuel** – The approved fuel for the heaters (Unit Ref. No: 4-7 and 9-36) is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-850)
29. **Fuel** – The approved fuel for the two emergency fire pumps (Unit Ref. No: 8A and 8B) is diesel. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-850)
30. **Fuel Throughput** – The boilers, heaters, and ovens shall consume no more than 1239×10^6 cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)
31. **Fuel** - The natural gas fuels shall meet the specifications below:
- NATURAL GAS:
Minimum heat content: **1020 Btu/ft³ HHV.**

(9 VAC 5-80-850)
32. **Operating and Training Procedures** - Boiler emissions shall be controlled by proper operation and maintenance of combustion. Boiler operators shall be trained in the proper operation of all such

equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9 VAC 5-80-850)

33. **Emission Limits** - Emissions from the operation of the boilers shall not exceed the limits specified below:

Particulate Matter	0.2 lbs/hr	0.7 tons/yr
PM-10	0.2 lbs/hr	0.7 tons/yr
PM-2.5	0.2 lbs/hr	0.7 tons/yr
Nitrogen Oxides	2.1 lbs/hr	9.0 tons/yr
Carbon Monoxide	1.7 lbs/hr	7.5 tons/yr
Volatile Organic Compounds	0.1 lbs/hr	0.5 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 27, 30, and 31.
(9 VAC 5-80-850 and 9 VAC 5-50-260)

34. **Emission Limits** - Emissions from the operation of the heaters shall not exceed the limits specified below:

Particulate Matter	0.2 lbs/hr	1.0 tons/yr
PM-10	0.2 lbs/hr	1.0 tons/yr
PM- 2.5	0.2 lbs/hr	1.0 tons/yr
Nitrogen Oxides	2.9 lbs/hr	12.6 tons/yr
Carbon Monoxide	2.4 lbs/hr	10.5 tons/yr
Volatile Organic Compounds	0.2 lbs/hr	0.7 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 28, 30, and 31.
(9 VAC 5-80-850 and 9 VAC 5-50-260)

35. **Emission Limits** - Emissions from the operation of the emergency fire pumps shall not exceed the limits specified below:

Nitrogen Oxides	15.8 lbs/hr	4.0 tons/yr
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Carbon Monoxide	3.4 lbs/hr	0.9 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number 29.
(9 VAC 5-80-850 and 9 VAC 5-50-260)

36. **Emission Limits** - Emissions from the operation of the ovens shall not exceed the limits specified below:

Particulate Matter	0.8 lbs/hr	3.6 tons/yr
PM-10	0.8 lbs/hr	3.6 tons/yr
PM- 2.5	0.8 lbs/hr	3.6 tons/yr
Nitrogen Oxides	10.8 lbs/hr	47.5 tons/yr
Carbon Monoxide	9.1 lbs/hr	39.9 tons/yr
Volatile Organic Compounds	19.3 lbs/hr	84.5 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 2, 3, 4, 6, 7, 17, 21, 22, 23, 24, and 30.
(9 VAC 5-80-850 9 VAC 5-80-1180 and 9 VAC 5-50-260)

37. **Emission Limits** - Emissions from the operation of the storage bins and transfer systems shall not exceed the limits specified below:

Particulate Matter	8.0 lbs/hr	35.0 tons/yr
PM-10	4.4 lbs/hr	19.3 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 9, 10, 12, and 13.
(9 VAC 5-80-850 and 9 VAC 5-50-260)

38. **Plantwide Emission Limits** - Total emissions from the bakery shall not exceed the limits specified below:

Particulate Matter	10.5 lbs/hr	40.8 tons/yr
PM-10	6.9 lbs/hr	25.1 tons/yr
Sulfur Dioxide	1.2 lbs/hr	0.7 tons/yr
Nitrogen Oxides	31.6 lbs/hr	73.0 tons/yr

Carbon Monoxide	16.7 lbs/hr	58.9 tons/yr
Volatile Organic Compounds	20.9 lbs/hr	86.0 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 2, 3, 4, 6, 7, 9, 10, 12, 13, 17, 21, 22, 23, 24, 27, 28, 29, 30, and 31.
(9 VAC 5-80-850, 9 VAC 5-80-1180 and 9 VAC 5-50-260)

39. **Visible Emission Limit** - Visible emissions from the entire facility shall not exceed 5 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during malfunction.
(9 VAC 5-80-850, 9 VAC 5-80-1180 and 9 VAC 5-50-260)
40. **Visible Emissions** – The permittee shall furnish written notification to the Director, Piedmont Regional Office of the anticipated date of visible emissions evaluations of the sugar unloading system postmarked at least 30 days prior to such date.
(9 VAC 5-50-50)
41. **Visible Emissions Evaluation** – Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations from the 3 stacks to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Region.
(9 VAC 5-50-30 G)

TESTING

42. **Emissions Testing** - The facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
(9 VAC 5-80-880 and 9 VAC 5-80-850)

RECORDS

43. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
- Annual hours of operation of the emergency fire pumps, calculated monthly as the sum of each consecutive 12 month period.
 - Annual hours of operation of Ovens #1-9, calculated monthly as the sum of each consecutive 12 month period.
 - Annual throughput of the flour, sugar, and minor ingredients, calculated monthly as the sum of each consecutive 12 month period.
 - Annual throughput of seasoning mix, calculated monthly as the sum of each consecutive 12 month period.
 - Annual consumption of natural gas, calculated monthly as the sum of each consecutive 12 month period.

- f. Annual throughput of the heat input, calculated monthly as the sum of each consecutive 12 month period.
- g. Log of observations of the combustion temperature monitoring device on the RTO.
- h. Log of observations of the temperature monitoring device on the oxidizer.
- i. Record temperature for the catalytic oxidizer (for Oven #7) on a weekly basis, during normal operations.
- j. The results of any visible emission evaluations (VEE's).
- k. Operation and control device monitoring records for the pressure drop in the two (2) fabric filters used in the seasoning process on Line #7.
- l. Scheduled and unscheduled maintenance records for all process equipment and air pollution control equipment.
- m. Inventory of spare parts to minimize durations of air pollution control equipment breakdowns.
- n. Written operating procedures for all process equipment and air pollution control equipment.
- o. Operator training records.
- p. The results of any emissions testing.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-900 and 9 VAC 5-80-1180)

GENERAL CONDITIONS

44. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
 - c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
 - d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

(9 VAC 5-170-130 and 9 VAC 5-80-850)

45. **Notification for Control Equipment Maintenance** - The permittee shall furnish notification to the Director, Piedmont Region, of the intention to shut down or bypass, or both, air pollution control

equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-20-180 C and 9 VAC 5-80-850)

46. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Piedmont Region, of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Piedmont Region, in writing.

(9 VAC 5-20-180 C and 9 VAC 5-80-850)

47. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-20-180 I and 9 VAC 5-80-850)

48. **Maintenance/Operating Procedures** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-50-20 E and 9 VAC 5-80-850)

49. **Permit Suspension/Revocation** - This permit may be suspended or revoked if the permittee:
- a. Knowingly makes material misstatements in the application for this permit or any amendments to it;
 - b. Fails to comply with the terms or conditions of this permit;
 - c. Fails to comply with any emission standards applicable to the equipment listed in Condition 2;
 - d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;
 - e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect on the date that the application for this permit is submitted;
 - f. Fails to comply with the applicable provisions of Articles 6, 8 and 9 of 9 VAC 5 Chapter 80.
(9 VAC 5-80-1010)
50. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Piedmont Region, of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-940)
51. **Registration/Update** - Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.
(9 VAC 5-80-900)
52. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-860 D)